This document should serve as a useful guide for examination preparation. The Board of Registry criterion-referenced examinations are constructed to measure the competencies described in the Certification Levels Definitions. These competency statements are specified into task definitions, linked to each of the content outlines, and measured by the test items.

It should be noted that, for the technician, the Certification Levels Definitions refer to skills and abilities expected of career entry, not those that may be acquired with subsequent experience.

Knowledge
The technician has a working comprehension of pre-analytical variables derived from specimen collection and handling of laboratory tests. The technician maintains an awareness and complies with safety procedures and ethical standards of practice. The technician understands basic anatomy and physiology recognizing appropriate test selection and factors that may interfere with laboratory testing.

Technical Skills
- Follows established procedures for collecting and processing biological specimens for analysis.

The technician comprehends and follows procedural guidelines to perform laboratory tests including (1) specimen collection and processing; (2) instrument operation and troubleshooting; (3) quality control monitoring; (4) computer applications and (5) safety requirements.

Problem Solving and Decision Making
- Recognizes unexpected results and instrument malfunction and takes appropriate action.

The technician recognizes the existence of procedural and technical problems and takes corrective action according to predetermined criteria or refers the problem to the appropriate supervisor. The technician prioritizes test requests to maintain standard patient care and maximal efficiency.

Communication and Documentation
- Provides laboratory information to authorized sources.
- Uses verbal and nonverbal communication skills to communicate effectively with patients.

The technician communicates specimen requirements, reference ranges, and test results, and prepares drafts of procedures for laboratory tests according to a standard format.

Teaching and Training Responsibilities
- Demonstrates laboratory technical skills to other laboratory personnel.

The technician trains new technicians and students and maintains technical competence.
THE EXAMINATION MODEL

The Board of Registry criterion-referenced examination model consists of three interrelated components:

COMPETENCY STATEMENTS describes the entry-level skills and tasks performed by phlebotomy technicians and measured on the examination.

CONTENT OUTLINE delineates general categories or subtest areas of the examination.

TAXONOMY levels describe the cognitive skills required to answer the questions.

Level 1 - Recall: Ability to recall or recognize previously learned (memorized) knowledge ranging from specific facts to complete theories.

Level 2 - Interpretive Skills: Ability to utilize recalled knowledge to interpret or apply verbal, numeric or visual data.

Level 3 - Problem Solving: Ability to utilize recalled knowledge and interpretation/application of distinct criteria to resolve a problem or situation and/or make an appropriate decision.

EXAMINATION REPORTING MECHANISMS

After the examination has been administered and scored, a report is sent to the examinee. The Examinee Performance Report provides the scaled score on the total examination and pass/fail status for all candidates.

In addition, failing candidates receive scaled scores for each subtest (see content outline for subtests). This information may help the examinee identify areas of strengths and weaknesses in order to develop a study plan for future examinations. A total score of 400 is required to pass the examination.

COMPETENCY STATEMENTS
PHLEBOTOMY TECHNICIAN

In regard to Circulatory System, Specimen Collection, Specimen Processing and Handling, Point-of-Care Testing, Non-Blood Specimens, and Laboratory Operations related to Phlebotomy, and in accordance with established procedures, the Phlebotomy Technician at career entry:

APPLIES KNOWLEDGE OF

- principles of basic and special procedures
- basic anatomy and physiology
- pre-analytic variables
- standard operating procedures

- medical terminology
- safety measures/infection control
- fundamental biological characteristics

SELECT APPROPRIATE

- course of action
- equipment/methods/reagents/samples

- quality control procedures
- site for blood collection

PREPARES PATIENTS, SAMPLES AND EQUIPMENT

EVALUATES

- specimen and patient situation
- quality control procedures
- appropriate actions and methods

- sources of pre-analytic variables
- common procedural/technical problems
- corrective action
CONTENT OUTLINE
PHLEBOTOMY TECHNICIAN
Refer to the PBT Competency Statements for the competencies tested in each subtest.

I. Circulatory System
(5% of total examination)
A. Structure and Function of the Circulatory System
   1. Heart and arteries
   2. Capillaries
   3. Veins
B. Composition/Function of Blood
   1. Plasma/serum
   2. Cellular elements (RBC, WBC, platelets)
C. Terminology

II. Specimen Collection (Venipuncture, Skin Puncture, Arterial Puncture)
(55% of total examination)
A. Patient Identification
B. Patient Assessment/Preparation
C. Site Selection
D. Techniques
E. Common Tests
F. Common Problems
G. Equipment (e.g., tubes/anticoagulant, needles, tourniquet, lancets, syringes)
H. Terminology

III. Specimen Processing and Handling
(15% of total examination)
A. Specimen Types/Suitability
   1. Routine specimens
   2. Unusual specimen types (e.g., trace metal elements)
   3. Neonatal screening
   4. Chain of custody specimens
B. Accessioning
C. Labeling
D. Transport and Storage
   1. Temperature
   2. Light
   3. Time
E. Equipment (e.g., centrifuge)
F. Terminology

IV. Point-of-Care Testing (POCT)
(8% of total examination)
A. Urinalysis
B. Hemoglobin & Hematocrit
C. Coagulation (e.g., PT, ACT, Bleeding Time)
D. Basic Chemistry (e.g., glucose, electrolytes)
E. Other
F. Terminology

V. Non-Blood Specimens (Urine, Stool, Other)
(7% of total examination)
A. Physiology
B. Patient Preparation
C. Patient Collection
D. Processing and Handling
E. Terminology

VI. Laboratory Operations Related to Phlebotomy
(12% of total examination)
A. Quality Control
   1. Techniques
   2. Equipment
B. Quality Improvement
C. Interpersonal Relations (e.g., age-specific communication)
D. Professional Ethics
E. Regulatory Agencies (e.g., OSHA, CLSI, CDC)
   1. Safety
      a. Personal
      b. Equipment
      c. Laboratory/hospital (e.g., fire, chemical)
   2. Infection control
      a. Protective equipment
      b. Disposal of contaminated equipment
      c. Hand hygiene
   3. Coding/billing
   4. Patient confidentiality (e.g., HIPAA)
F. Terminology

All Board of Registry examinations use conventional units for results and reference ranges.

END OF CONTENT GUIDELINE